Willow Creek Subbasin Assessment and TMDLs

Department of Environmental Quality

May 18, 2004

4. Subbasin Assessment – Summary of Past and Present Pollution Control Efforts

East Side Soil & Water Conservation District, NRCS, and IDFG are contributing agencies to conservation programs and pollution control efforts in the subbasin.

Over the past 20 years, the East Side Soil & Water Conservation District and the NRCS have managed, in cooperation with local ranchers and farmers, several conservation programs intended to reduce erosion, increase and improve wildlife habitat, and protect surface and ground water by reducing runoff and sedimentation. According to NRCS, 49% of the Willow Creek watershed has been treated with a conservation program at one time or another. Table 42 provides a summary of the conservation programs implemented throughout the Willow Creek Subbasin.

Table 42. Willow Creek Subbasin Conservation Programs.

Program	Acres
Conservation Reserve Program (CRP)	32,080
Environmental Quality Incentives Program (EQIP)	9,855
Resource Conservation and Development Program (RCRDP)	39,624
Water Quality Program for Agriculture (WQPA)	59,680
Long Term Agreements (LTA)	4,400
1985 Food Security Act	60,437
Total	206,076

Listed below are descriptions of each conservation program, along with a summary of their locations in the Willow Creek Subbasin. Figure 27 illustrates the locations of NRCS conservation programs in the subbasin.

- The Conservation Reserve Program (CRP) reduces erosion and enhances wildlife habitat by encouraging farmers to convert highly erodible cropland to vegetative cover in exchange for an annual rental payment. The largest continuous portions of CRP land occur in the Willow Reservoir sub-watershed around the Ririe Reservoir and in the Meadow Creek drainage, the Tex Creek and Lower Willow sub-watersheds, and in the Willow, Tex, and Rock Creek drainages. Small pockets of CRP are on Grays Lake Outlet, between the outlet and Brockman Creek, and on Willow Creek at the Sellars Creek confluence.

- Environmental Quality Incentives Program (EQIP) was established in the 1996 Farm Bill to provide assistance for farmers and ranchers for improvement projects. The program was specifically designed for areas with serious threats to soil and water quality. EQUIP projects in the Willow Creek Subbasin are along Hell Creek, in the Birch Creek and Canyon Creek drainages, and along Willow Creek near the Canyon Creek confluence.

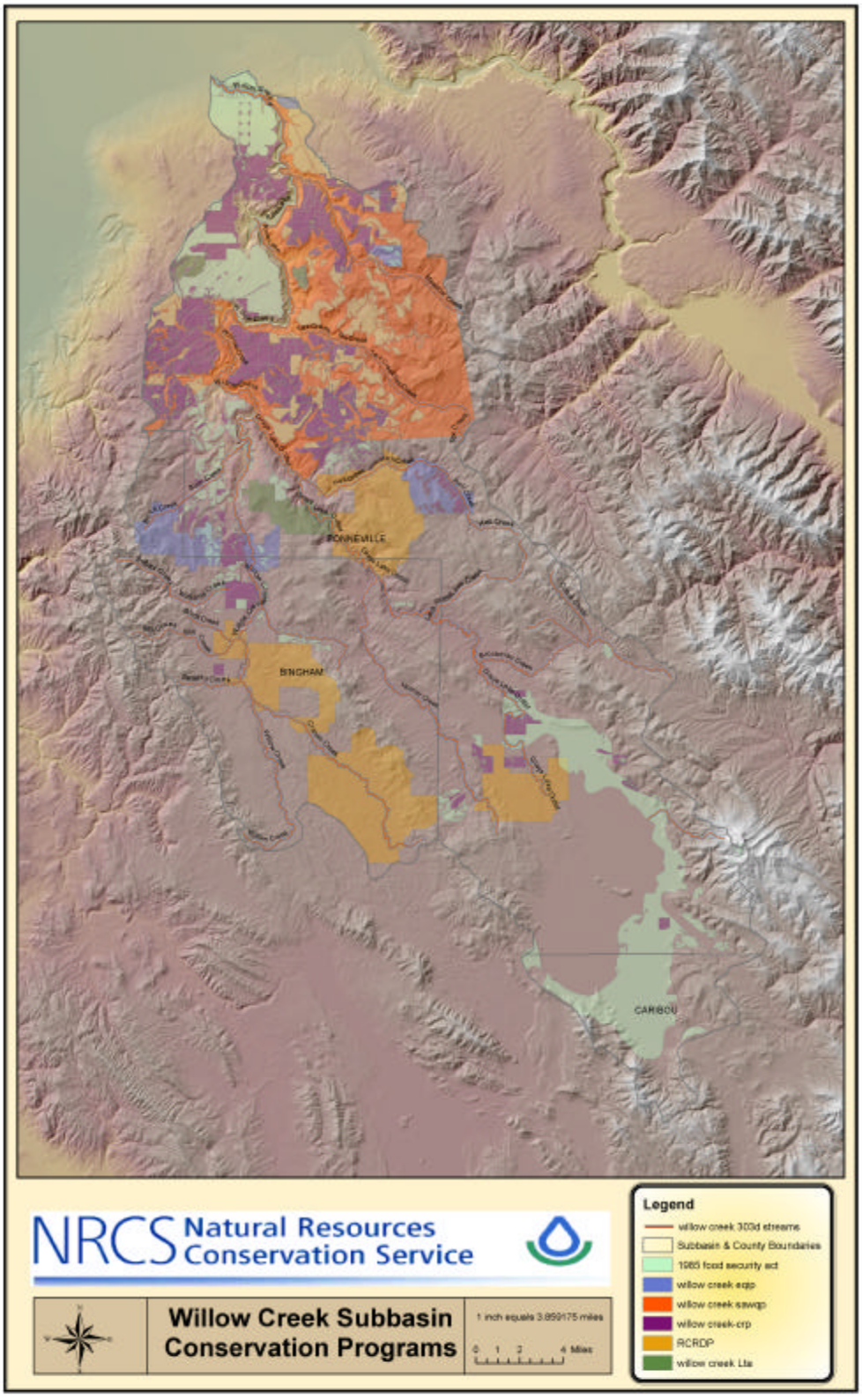

Figure 27. NRCS Conservation Projects in the Willow Creek Subbasin.

- The Resource Conservation and Development Program (RCRD) program is funded through grants authorized by the Idaho Legislature to finance projects focused on improving rangeland and riparian areas. Areas along Hell Creek, Grays Lake Outlet, Crane Creek, and Willow Creek participate in the RCRD program.

- The Water Quality Program for Agriculture (WQPA), formerly known as State Agriculture Water Quality Program (SAWQP), provides financial incentives to owners and operators of agriculture lands to apply conservation practices to protect and enhance water quality and fish and wildlife habitat. All lands treated under WQPA are in the Lower Willow, Tex Creek, and Willow Reservoir sub-watersheds.

- Long Term Agreements (LTA) are binding agreements between the NRCS or the conservation districts and landowner participants that provides cost-sharing for a conservation project aimed at protecting water, soil, and related resources. The most significant LTA project in the subbasin is along Grays Lake Outlet.

To promote and restore fish spawning and rearing in the Willow Creek Subbasin, IDFG coordinated fishery rehabilitation projects along three premier spawning tributaries: Sellars Creek, Mill Creek, and Tex Creek. (Fredericks 2003)

- Regional fisheries management personnel constructed approach pools and installed angle iron fish ladders in culverts crossing Sellars Creek and Mill Creek. These projects were designed to facilitate cutthroat trout spawning migration from Willow Creek to spawning and rearing habitat in upper Sellars and Mill Creeks. The projects were accomplished as cooperative projects with volunteer assistance from local anglers and a Boy Scout troop.

- Two riparian exclusion fences were constructed on Sellars Creek to rehabilitate and protect riparian habitat. Approximately one mile of fence, on both sides of Sellars Creek was constructed on the LDS Stake Farm between the Blackfoot Reservoir Road and Wolverine Road. The second fence was constructed on privately owned property approximately one mile above the Stake Farm fence.

- A box culvert was installed in Tex Creek on the lower Tex Creek road to insure fish passage.

Within the last five years, IDL and its lessees have implemented several range improvement programs in a direct effort to improve riparian area conditions. Some of those projects include:

1) Two wells with associated storage tanks and troughs were installed to provide offsite water and reduce grazing pressure along Grays Lake Outlet.
2) Three wells with associated storage tanks and troughs were installed to provide offsite water and reduce grazing pressure along Willow Creek, Hancock Creek and Crane Creek.

3) Two wells with associated storage tanks and troughs were installed to provide offsite water and reduce grazing pressure along Crane Creek.
4) Two and one-half miles of division fence was constructed to allow for more intensive grazing management and better grazing control on lower Lava Creek.
5) One and one-half miles of division fence was constructed to allow for more intensive grazing management and better grazing control on upper Lava Creek.
6) Eight spring developments with associated troughs are being constructed to provide offsite water and reduce grazing pressure along Grays Lake Outlet and Lava Creek.

Additional range improvements have also been completed over the past 20 years to improve grazing management on streams including Upper Crane Creek and its tributaries, Mill Creek, Upper Willow Creek, Brockman Creek, Homer Creek, Dan Creek, Grays Lake Outlet, Lava Creek and Sawmill Creek.